

## S3G BACKDRAFT DAMPER

### STANDARD CONSTRUCTION

#### FRAME

20 gage (1.0) galvanized steel.

#### BLADES

28 gage (.50) galvanized steel.

#### BLADE SEAL

Extruded vinyl mechanically locked into blades.

#### AXLES

Stainless steel.

#### LINKAGE

Stainless steel pins, galvanized steel tie bar.

#### FINISH

Mill.

#### TEMPERATURE LIMITS

-40°F to +200°F (-40°C to 94°C).

#### MAXIMUM FACE VELOCITY

3000 fpm. Widths over 36" (914) up to 42" (1067) are limited to 1500 fpm.

#### MINIMUM SIZE

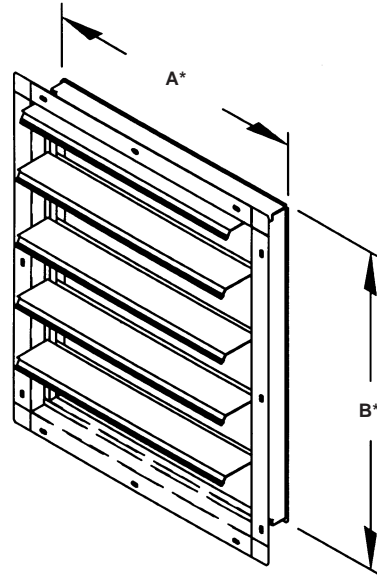
8" x 8" (203 x 203).

#### MAXIMUM SIZE

Single section – 42" x 64" (1067 x 1626).  
Multiple section assembly – Unlimited Size.

Dimensions in inches, parenthesis ( ) indicate millimeters.

Units furnished 1/4" (6) smaller than given opening dimensions.



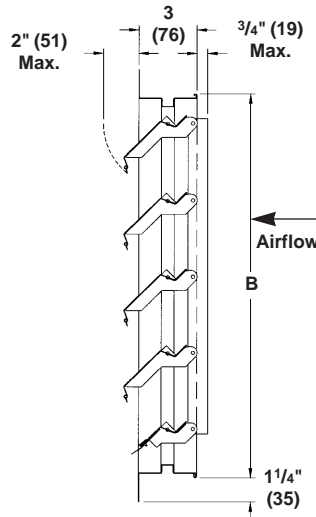
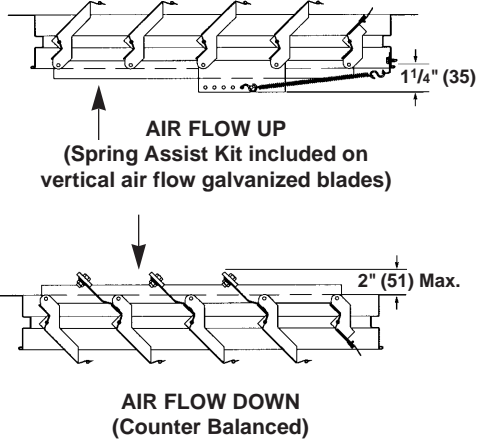
### FEATURES

- Wide operating range – velocities up to 3000 fpm
- Corrosion resistant galvanized steel construction
- Blade design for weather protection and leakage
- Pre-punched mounting hole in flange frame units
- Mechanically locked blade seals

### VARIATIONS

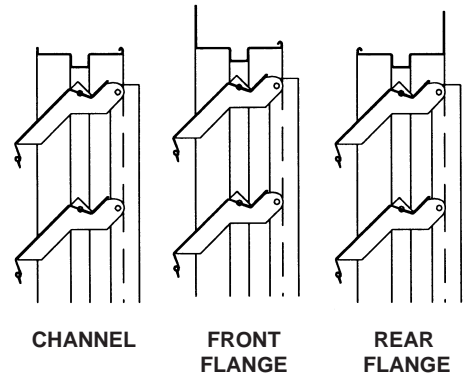
- Counterweights and spring assist kits for vertical airflow and extremely low pressure reliefs
- Electric actuators
- Chain pulls
- Sleeves
- Aluminum blades†
- Front or rear screens

† See chart page two for maximum fpm and damper size

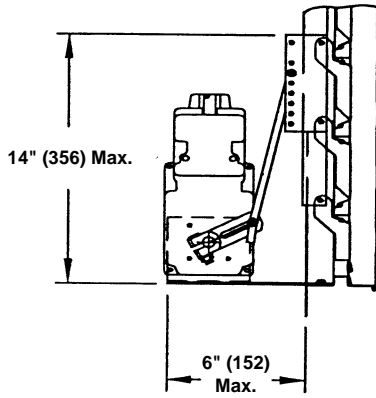


Front Flange Shown

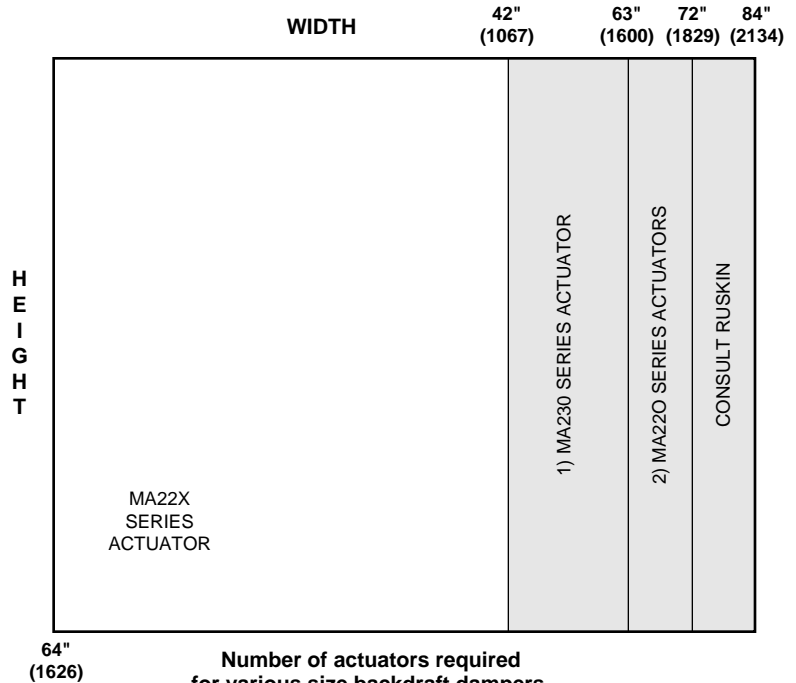
### FRAME TYPES



QTY.	MODEL	OPENING DIMENSION		TYPE FRAME	AIR FLOW			ACTUATORS		VOLTAGE	VARIATIONS
		A*	B*		HORIZ.	UP	DOWN	FACTORY INSTALLED	SHIPPED LOOSE		



**MA220/MA230  
ACTUATOR ENVELOPE DIMENSIONS**



**Number of actuators required  
for various size backdraft dampers.**

If not on chart consult Ruskin.

## PERFORMANCE DATA

AIR VELOCITY IN FEET PER MINUTE THROUGH FREE AREA	STATIC PRESSURE DROP IN INCHES W.G.
600	.110
800	.110
1000	.075
1200	.070
1500	.100
1800	.140
2000	.180
2500	.290
3000	.390

**S3G PRESSURE DROP**  
Based on 36" x 36" (914 x 914) unit.

## SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans or in accordance with schedules, backdraft dampers that meet the following minimum construction standards: Frame shall be 20 gage (1.0) roll-formed galvanized steel. Backdraft dampers with flange frame, when required, shall have pre-punched mounting holes and welded corner clips for maximum rigidity.

Blades shall be 28 gage (.50) roll-formed galvanized steel. Blade edge seals shall be extruded vinyl, mechanically locked into blade edge. Blade ends shall overlap for optimum weather protection.

Axles and linkage pins shall be stainless steel. Tiebar shall be galvanized steel and concealed in jamb. Backdraft dampers shall be designed for maximum 3000 fpm face velocities. Dampers shall be in all respects equivalent to Ruskin model S3G.

### SPECIFIER SELECT OPTION

Electric actuators shall be (24 volt, 120 volt, 220 volt – specifier select one) and shall be factory furnished and mounted or supplied as a kit for field installation.

MAXIMUM VELOCITY FOR ALUMINUM BLADE UNITS	
DAMPER WIDTH	MAXIMUM FPM
8" (203) - 28" (711)	3000 FPM
Over 28" (711) - 32" (813)	2500 FPM
Over 32" (813) - 36" (914)	1750 FPM
Units over 36" (914) wide will be multiple section	



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